# SAFETY DATA SHEET
## Commercial ABC Dry Chemical Fire Extinguisher (Re-chargeable and Non-rechargeable)

Walter Kidde Portable Equipment, Inc. encourages and expects you to read and understand the entire SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

## 1. IDENTIFICATION

| | |
|---|---|
| **Product Name** | Commercial ABC Dry Chemical Fire Extinguisher |
| **Other Names** | Ammonium Phosphate, Monoammonium Phosphate, ABC, Pyro-Chem, Multi-Purpose |
| **Recommended use of the chemical and restrictions on use** | |
| **Identified uses** | Fire Extinguisher (re-chargeable and non-rechargeable) |
| **Restrictions on use** | For firefighting use on Class A, B, C types of fires |
| **Company Identification** | Walter Kidde Portable Equipment, Inc.<br>1016 Corporate Park Drive<br>Mebane, NC 27302<br>USA |
| **Customer Information Number** | (919) 563-5911<br>(919) 304-8200 |
| **Emergency Telephone Number** | |
| **CHEMTREC Number** | (800) 424-9300<br>(703) 527-3887 (International) |
| **Issue Date** | October 20, 2023 |
| **Supersedes Date** | March 4, 2021 |

*Safety Data Sheet prepared in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200), the Canadian Hazardous Products Regulations (HPR) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)*

## 2. HAZARD IDENTIFICATION

**Hazard Classification**
Gas under pressure – Compressed gas

**Label Elements**
Hazard Symbols

Signal Word: Warning

**Hazard Statements**
Contains gas under pressure; may explode if heated.

**Precautionary Statements**
**Prevention**
None
**Response**
None

## 2. HAZARD IDENTIFICATION

**Storage**
Protect from sunlight.
Store in well-ventilated place.
**Disposal**
None

**Other Hazards**
Rechargeable fire extinguishers as sold are charged with compressed air. When recharged with nitrogen as instructed, they present a simple asphyxiant hazard and exposure to nitrogen gas at high concentrations can cause suffocation by reducing oxygen available for breathing.

This product may contain trace quantities of quartz (crystalline silica) as an impurity. Prolonged exposure to respirable crystalline silica dust at concentrations exceeding the occupational exposure limits may increase the risk of developing a disabling lung disease known as silicosis. IARC has determined that Crystalline silica in the form of quartz or cristobalite dust is carcinogenic to humans (Group 1). To the best of our knowledge, it is unlikely that crystalline silica is above the concentration limit of 0.1% that would require classification.

**Specific Concentration Limits**
The values listed below represent the percentages of ingredients of unknown toxicity.

| | |
|---|---|
| Acute oral toxicity | < 10% |
| Acute dermal toxicity | < 10% |
| Acute inhalation toxicity | < 10% |
| Acute aquatic toxicity | < 10% |

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

| **Components** | **CAS Number** | **Concentration*** |
|---|---|---|
| Calcium Carbonate | 471-34-1 | 10 – 30% |
| Mica | 12001-26-2 | 0.5 – 1.5% |
| Kaolin Clay | 1332-58-7 | 0.5 – 1.5% |
| **Non-hazardous ingredients** | | |
| Monoammonium Phosphate | 7722-76-1 | 45 – 70% |
| Ammonium Sulfate | 7783-20-2 | 10 – 30% |

**Note: Pressurized extinguishers are sold using compressed air as the expellant. Rechargeable extinguishers are specified to be recharged with nitrogen.**

*Exact concentration withheld as trade secret.

## 4. FIRST- AID MEASURES

**Description of necessary first-aid measures**
**Eyes**
Immediately flood the eye with plenty of water for several minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

## 4. FIRST- AID MEASURES

**Skin**
Wash skin thoroughly with soap and water. Obtain medical attention if irritation persists.
**Ingestion**
Dilute by drinking large quantities of water and obtain medical attention.
**Inhalation**
Move victim to fresh air. Obtain medical attention immediately for any breathing difficulty.

**Most important symptoms/effects, acute and delayed**
Aside from the information found under Description of necessary first aid measures (above) and Indication of immediate medical attention and special treatment needed, no additional symptoms and effects are anticipated.

**Indication of immediate medical attention and special treatment needed**
**Notes to Physicians**
Treat symptomatically.

## 5. FIRE - FIGHTING MEASURES

**Suitable Extinguishing Media**
This preparation is used as an extinguishing agent and therefore is not a problem when trying to control a fire. Use extinguishing agent appropriate to other materials involved. Keep pressurized containers and surroundings cool with water spray as they may rupture or burst in the heat of a fire.

**Specific hazards arising from the chemical**
Pressurized containers may explode in heat of fire.

**Special Protective Actions for Fire-Fighters**
Wear full protective clothing and self-contained breathing apparatus as appropriate for specific fire conditions.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**
Wear appropriate protective clothing. Prevent skin and eye contact. Remove leaking container to a safe place. Ventilate the area.

**Environmental Precautions**
Prevent large quantities of the material from entering drains or watercourses.

**Methods and materials for containment and cleaning up**
Sweep up or vacuum and transfer into suitable containers for recovery or disposal.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**
Wear appropriate protective clothing. Prevent skin and eye contact.

## 7. HANDLING AND STORAGE

**Conditions for safe storage**
Pressurized containers should be properly stored and secured to prevent falling or being knocked over. Do not drag, slide or roll pressurized containers. Do not drop pressurized containers or permit them to strike against each other. Never apply flame or localized heat directly to any part of the pressurized container. Store pressurized containers away from high heat sources. Storage area should be: - cool - dry - well ventilated - under cover - out of direct sunlight

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**
Exposure limits are listed below, if they exist.

**Calcium Carbonate**
OSHA PEL: 15 mg/m$^3$ TWA, total dust
5 mg/m$^3$ TWA, respirable fraction
**Mica**
ACGIH TLV: 0.1 mg/m3 TWA, measured as respirable fraction of the aerosol, containing <1% crystalline silica
OSHA PEL: 20 mppcf, <1% crystalline silica
**Kaolin**
ACGIH TLV: 2 mg/m$^3$ TWA, for particulate matter containing no asbestos and <1% Crystalline silica
OSHA PEL: 15 mg/m$^3$ TWA, total dust
5 mg/m$^3$ TWA, respirable fraction
**Particulates not otherwise classified /regulated**
OSHA PEL: 50 mppcf or 15 mg/m$^3$ TWA, total dust
15 mppcf or 5 mg/m$^3$ TWA, respirable fraction

**Appropriate engineering controls**
Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.

**Individual protection measures**
**Respiratory Protection**
Wear respiratory protection if there is a risk of exposure. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.
**Skin Protection**
Gloves
**Eye/Face Protection**
Chemical goggles or safety glasses with side shields.
**Body Protection**
Normal work wear.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Agent**
**Appearance**

| | |
|---|---|
| **Physical State** | Solid (powder) |
| **Color** | Pale Yellow |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Odor** | Odorless |
| **Odor Threshold** | No data available |
| **pH** | Not applicable |
| **Specific Gravity** | No data available |
| **Boiling Range/Point (°C/F)** | Not applicable |
| **Melting Point (°C/F)** | No data available |
| **Flash Point (PMCC) (°C/F)** | Not flammable |
| **Vapor Pressure** | No data available |
| **Evaporation Rate (BuAc=1)** | No data available |
| **Solubility in Water** | No data available |
| **Vapor Density (Air = 1)** | Not applicable |
| **VOC (g/l)** | None |
| **VOC (%)** | None |
| **Partition coefficient (n-octanol/water)** | No data available |
| **Viscosity** | No data available |
| **Auto-ignition Temperature** | No data available |
| **Decomposition Temperature** | No data available |
| **Upper explosive limit** | No data available |
| **Lower explosive limit** | No data available |
| **Flammability (solid, gas)** | No data available |

**Expellant – Nitrogen (for recharged extinguishers)**

| | |
|---|---|
| **Appearance** | |
| **Physical State** | Compressed gas |
| **Color** | Colorless |
| **Odor** | None |
| **Odor Threshold** | No data available |
| **pH** | Not applicable |
| **Specific Gravity** | 0.075 lb/ft$^3$ @70˚F as vapor |
| **Boiling Range/Point (°C/F)** | -196˚C/-321˚F |
| **Melting Point (°C/F)** | -210˚C/-346˚F |
| **Flash Point (PMCC) (°C/F)** | Not flammable |
| **Vapor Pressure** | No data available |
| **Evaporation Rate (BuAc=1)** | Not applicable |
| **Solubility in Water** | 0.02 g/L |
| **Vapor Density (Air = 1)** | 0.97 |
| **VOC (g/l)** | Not applicable |
| **VOC (%)** | Not applicable |
| **Partition coefficient (n-octanol/water)** | No data available |
| **Viscosity** | Not applicable |
| **Auto-ignition Temperature** | No data available |
| **Decomposition Temperature** | No data available |
| **Upper explosive limit** | Not explosive |
| **Lower explosive limit** | Not explosive |
| **Flammability (solid, gas)** | Not flammable |

## 10. STABILITY AND REACTIVITY

**Reactivity**
Pressurized containers may rupture or explode if exposed to heat.

**Chemical Stability**
Stable under normal conditions.

**Possibility of hazardous reactions**
Hazardous polymerization will not occur.

**Conditions to Avoid**
Exposure to direct sunlight - contact with incompatible materials

**Incompatible Materials**
Strong oxidizing agents - strong acids - sodium hypochlorite

**Hazardous Decomposition Products**
Oxides of carbon - ammonia - oxides of phosphorus - nitrogen oxides

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity**
Calcium Carbonate:
Oral LD50 (Rat) >2000 mg/kg
Dermal LD50 (Rabbit) >2000mg/kg
Inhalation LC50(rat) >3.0mg/l
Mica:
Oral LD50 (Rat) >2000 mg/kg
Clay:
Oral LD50 (Rat) >5000 mg/kg
Dermal LD50 (Rabbit) >5000mg/kg
Nitrogen
Simple asphyxiant

**Specific Target Organ Toxicity (STOT) – single exposure**
Nitrogen: Exposure to nitrogen gas at high concentrations can cause suffocation by reducing oxygen available for breathing. Breathing very high concentrations can cause dizziness, shortness of breath, unconsciousness or asphyxiation.

**Specific Target Organ Toxicity (STOT) – repeat exposure**
Calcium Carbonate: Available data indicates this component is not expected to cause target organ effects after repeat exposure.

**Serious Eye damage/Irritation**
Calcium Carbonate: Not irritating (rabbit)
Mica: Not irritating (rabbit)

**Skin Corrosion/Irritation**
Calcium Carbonate: Not irritating (rabbit)
Mica: Not irritating (rabbit)

## 11. TOXICOLOGICAL INFORMATION

**Respiratory or Skin Sensitization**
Calcium Carbonate: Non-sensitizing to skin in Mouse local lymph node assay.

**Carcinogenicity**
This product may contain trace quantities of quartz (crystalline silica) as an impurity. Prolonged exposure to respirable crystalline silica dust at concentrations exceeding the occupational exposure limits may increase the risk of developing a disabling lung disease known as silicosis. IARC has classified Silica Dust, Crystalline, in the form of quartz or cristobalite as 1 (carcinogenic to humans).

**Germ Cell Mutagenicity**
Calcium Carbonate: Negative results in the Mammalian Cell Gene Mutation Assay with and without metabolic activation, Ames test, and In vitro Mammalian Chromosome Aberration Test.

**Reproductive Toxicity**
No relevant studies identified.

**Aspiration Hazard**
Not an aspiration hazard.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**
No relevant studies identified.

**Mobility in soil**
No relevant studies identified.

**Persistence/Degradability**
No relevant studies identified.

**Bioaccumulative Potential**
No relevant studies identified.

**Other adverse effects**
No relevant studies identified.

## 13. DISPOSAL CONSIDERATIONS

**Disposal Methods**
Dispose of container in accordance with all applicable local and national regulations.

## 14. TRANSPORT INFORMATION

| | |
|---|---|
| **DOT CFR 172.101 Data** | Fire extinguishers, 2.2, UN1044 |
| **UN Proper Shipping Name** | Fire extinguishers |
| **UN Class** | (2.2) |
| **UN Number** | UN1044 |
| **UN Packaging Group** | Not applicable |

## 14. TRANSPORT INFORMATION

| | |
|---|---|
| **Classification for AIR Transportation (IATA)** | Consult current IATA Regulations prior to shipping by air. |
| **Classification for Water Transport IMDG** | Consult current IMDG Regulations prior to shipping by water. |

When shipping via ground, portable fire extinguishers pressurized to less than 241 psi and of less than 1100 cubic inches in size meet the requirements of "Limited Quantity" as referenced in 49 CFR 173.309 (2010). There is no limited quantity designation for fire extinguishers when shipped by air or water.

This section is believed to be accurate at the time of preparation. It is not intended to be a complete statement or summary of the applicable laws, rules, or hazardous material regulations, and is subject to change. Users have the responsibility to confirm compliance with all laws, rules, and hazardous material regulations in effect at the time of shipping.

## 15. REGULATORY INFORMATION

**United States TSCA Inventory**
This product contains ingredients that are listed on or exempt from listing on the EPA Toxic Substance Control Act Chemical Substance Inventory.

**Canada DSL Inventory**
All ingredients in this product are listed on the Domestic Substance List (DSL) or the Non-Domestic Substance List (NDSL) or are exempt from listing.

**SARA Title III Sect. 311/312 Categorization**
Gas under pressure
Simple asphyxiant (when recharged with nitrogen)

**SARA Title III Sect. 313**
This product does not contain any chemicals that are listed in Section 313 at or above de minimis concentrations.

## 16. OTHER INFORMATION

**Legend**
ACGIH: American Conference of Governmental Industrial Hygienists
CAS#: Chemical Abstracts Service Number
EC50: Effect Concentration 50%
IARC: International Agency for Research on Cancer
LC50: Lethal Concentration 50%
LD50: Lethal Dose 50%
N/A: Denotes no applicable information found or available
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit
TLV: Threshold Limit Value
TSCA: Toxic Substance Control Act

Revision Date: October 20, 2023
Replaces: March 4, 2021

## 16. OTHER INFORMATION

Changes made: Section 2 – modified hazard statement.

**Information Source and References**
This SDS is prepared by Hazard Communication Specialists based on information provided by internal company references.

The information and recommendations presented in this SDS are based on sources believed to be accurate. Walter Kidde Portable Equipment, Inc. assumes no liability for the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of the material for their particular purposes. In particular, we make NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, with respect to such information, and we assume no liability resulting from its use. Users should ensure that any use or disposal of the material is in accordance with applicable Federal, State, and local laws and regulations.